3: Hiscocks G-4, 5 (1946-1949) 1953 EK1 Austria EK1

never yet have been used for the benefit of the people themselves. Between 1937 and 1944 the annual production was raised from 33,000 tons to 1,200,000, but this result was only achieved by uneconomic and wasteful methods that were damaging to the oil-fields and would not normally have been employed.

Under German occupation hydro-electric power production was also developed considerably. Between 1937 and 1945 the potential output of current was raised by about 61 per cent. But the extra power made available was not intended primarily for Austria's benefit. The country was split up and incorporated in separate 'power regions' of the Reich, the Vorarlberg being allotted to Baden, the Tyrol to Bavaria, and the eastern provinces joined up with Bohemia and Silesia. There was no direct transmission line between the eastern and western provinces. This arrangement made it impossible for Austria to utilize to the full her hydro-electric current when the War came to an end.

In spite of the numerous disadvantages, however, the economic effects on Austria of the *Anschluss* and the War were not entirely bad. German energy and efficiency brought direct results that otherwise were unlikely to have been achieved so quickly. Austrian interests were not consciously regarded during the process, but when Austria was restored to life some of the results turned out to be good and some were of potential value.

Although hydro-electric developments in Austria had been considered by the Germans as part of a greater whole, the new plants available on Austrian territory after the War were a valuable national asset. In course of time the grid could be adapted to suit Austrian needs. Furthermore, the fact that the Germans attached so much importance to Austrian current underlined its significance in Austrian eyes as a potential major export. During the post-War years Austrian statesmen and economists have been more conscious than ever before of the value of Austria's vast hydro-electric resources to the country's economy as a whole.

3: Hiscocks G-4, 5 (1946-1949) 1953 EK1 Austria EK1

figure. By the autumn of 1951 the small crafts, which employed nearly as many people as industry, had received only 14 million schillings from the counterpart fund, which was only 0·4 per cent of the total.

There was no branch of the Austrian economy in which the need for capital investment was greater than in fuel and power. Nor was there any branch to which the allocation of available funds would be the subject of less controversy. The Austrian Republic's shortage of coal, which had always been serious, was more acute than ever, owing to the development of the iron and steel industry. And Poland and Czechoslovakia, Austria's traditional suppliers, were now in the Russian orbit, and charged excessive prices for such coal as they were prepared to deliver. At the same time the country had vast potential sources of hydro-electric power, which only required capital for their development. It was most important that the development should take place both to economize consumption of coal and to satisfy the growing demands for electric current of Austrian industry and the Austrian people.

Austria's oil-fields were her main resources in mineral fuel, but, being under Russian control, they did not fall within the scope of the recovery programme. Her coal-mines, which produce 95 per cent lignite, could only satisfy between 25 and 30 per cent of her requirements in 1948 and 1949. As a result of forced production during the War and neglect of new development, the coal was difficult and expensive to work, and the output per miner was only three-quarters of the pre-War level, although the miners' own record had been excellent.

The production of hydro-electric current increased steadily during the War, until in 1944 it had more than doubled. In 1945, owing to the serious disorganization that accompanied the end of hostilities, output fell off considerably, but between 1945 and 1948 it rose from 2·51 billion kilowatt-hours to 4·45 billion. The steam-driven power-plants, so important for the maintenance of winter supplies, had suffered severe damage during the War, especially at Linz, and were not back in full production by 1948. Meanwhile the growing importance of

3: Hiscocks G-4, 5 (1946-1949) 1953 EK1 Austria EK1

electricity to the Austrian economy was shown by the fact that domestic consumption per household had increased by 60 per cent between 1938 and 1947. In 1947, also, Austria exported nearly a quarter of its total current production and stood second amongst European countries as an exporter of electric power.

Substantial ERP funds were allocated to the coal-mines for new development and modernization of equipment with the object of increasing productivity. Aid was also given in the reconstruction of the damaged steam-driven electric power-stations, and in the building of new stations in the neighbourhood of the lignite fields. But the bulk of assistance in the sphere of fuel and power was naturally devoted to the development of hydro-electric resources.

Austria's total potential hydro-electric power production is estimated at not less than 30 million kilowatt-hours a year, more than five times the present output. The possibilities were already realized in some measure before the end of the nineteenth century, and development between the Wars was help up mainly owing to lack of domestic and foreign capital on the large scale required. The European Recovery Programme offered a great opportunity, which was not likely to recur, and at the Paris Conference which considered the Marshall offer in the summer of 1947 the Austrian delegation began at once to consider proposals for electric power development. By the following year a general plan had been drawn up that aimed at doubling production in the ten years starting with 1948.

ERP support was limited to four years, but provided for the generous allocation of counterpart funds both for the completion of plants under construction and for the initiation of new works. The programme covered projects in all of the six provinces under the Western Allies, but was confined to them. The great plant planned at Ybbs-Persenbeug on the Danube in Lower Austria, with a potential output of a billion kilowatt-hours a year, had to be left out, because it was in the Russian zone. Major projects in Western Austria included those on the Ill in the Vorarlberg, on the Drau in Carinthia, and on the Enns, the Inn, and the Danube in Upper Austria. The new

3: Hiscocks G-4, 5 (1946-1949) 1953 EK1 Austria EK1

works begun at Braunau on the Inn and at Jochenstein on the Danube were undertaken in collaboration with Western Germany. Most important of all were the power-stations dependent on water stored in great mountain reservoirs, such as those at Achensee in the Tyrol and at Kaprun in Salzburg. This type had the great advantage of being able to reserve its major output for the winter months, when hydro-electric current was in short supply. If they were developed on a sufficiently large scale, it would be possible to reduce the number of steam-driven plants, and so economize coal.

Of all the hydro-electric projects in process of construction, Kaprun was the most significant for the Austrian economy as a whole. Three great reservoirs were to be created at different levels by the construction of a series of dams, the top two reservoirs being connected by a conduit through the mountains nearly twelve kilometres long. When the work is completed, the annual production of current will be 620 million kilowatt-hours, of which 460 million will be produced in winter.

After iron, oil, and coal, the most valuable of Austria's mineral resources at present being utilized is magnesite. The magnesite industry did not suffer seriously from the War, and after a temporary setback, owing to the coal and power shortage in 1946–7, had regained the pre-War level of production by 1948. The greater part of the magnesite produced was exported, some of it to the United States. As a dollar-earner, therefore it was important that the efficiency of the industry should be maintained and its production increased. The bulk of the capital required for modernization was provided by the industry itself, though an allocation was made from counterpart funds as well.

Austria also has small deposits of copper, lead, zinc, and subsidiary metals. Under normal conditions their development could hardly be justified economically in competition with the world's main sources of supply. But for two reasons a good deal of attention has been paid to them since the War: they provide materials essential for the important electrical industry, and Austria has not had the foreign exchange necessary to

During July 1946, the parliament passed the first nationalization law (see part A, III, paragraph b). This nationalized, in addition to enterprises of heavy industry, mining and shipping, the three largest Austrian commercial banks (the Creditanstalt-Bankverein, the Oesterreichische Länderbank A. G. and the Hypotheken- und Creditinstitut). With the federal law of March 26, 1947 (second nationalization law), establishments and plants producing and distributing electrical energy were nationalized, because 90 percent of these establishments were already publicly or municipally owned.

During the years 1945-1946 only the greatest difficulties were eliminated. A noticeable production increase, fostered by increasing imports of raw materials and food stuffs, occurred during 1947 at which time the coal situation was also eased and the crisis in the power sector could be ameliorated. The decisive turn of events in the economic consolidation, however, remained to be accomplished with the assistance of the Marshall Plan.

3. Special Problems in Austrian Reconstruction.

a) The question of "German Property."

At the end of the war, when Austria received her independence (perforce limited because of occupation statutes), her economic situation had been basically altered in comparison with 1937. The economically and organically different set-up of the German Reich made a reorganization of the economic status necessary. Austrian production means were diminished further by transfers of private as well as public production establishments into German hands, particularly after 1938. This "German Property" became fateful in Austrian economy with the Potsdam Agreement of August, 1945.

According to the agreed terms of the Allied Powers, German reparations were to include German assets located in countries previously occupied or controlled by Germany; these assets were to be subjected to the control of the various Allied Powers relative to their geographic location (in Austria according to occupation zones).

Under this title more than 200 enterprises in Austrian territory, mostly in the eastern part of the country (among them the entire oil industry,

471 some federal ministries as well as the reorganization
655 of the sphere of action of others), is being taken care of by the federal ministry for traffic and nationalized enterprises, the administration of the nationalized commercial banks falls within the competence of the Federal Ministry of Finance. The nationalization comprises:

[453] 1.) The large banks (Creditanstalt-Bankverein, Oesterreichische Länderbank AG, and Hypotheken- u. Kreditinstitut);

[327] 2.) The most important enterprises of the iron and steel industry (Oesterreichische Alpine Montangesellschaft, Vereinigte Oesterreichische Eisen- und Stahlwerke A. G., Linz, Schoeller-Bleckmann Stahlwerke A. G., Vienna, Gebrüder Böhler u. Co., A. G., Vienna);

[316] 3.) The most important coal mines (Wolfsegg-Traunthaler Kohlenbergwerke A.G., Linz, Steirische Kohlenbergwerke A.G., Vienna, Lankowitzer Kohlen-Compagnie, Vienna, etc.);

[392] 4.) A number of important enterprises of the
[393] electric and machine manufacturing industry (AEG-Union Elektrizitätsgesellschaft, Vienna; Simmering-Graz-Pauker A. G. für Maschinen-, Kessel- und Waggonbau, Vienna, etc.);

5.) The Oesterreichische Stickstoffwerke A. G., Linz;

[316] 6.) The most important non-ferrous mining enterprises (Bleiberger Bergwerks-Union, Klagenfurt; Montanwerke Brixlegg Ges. m.b.H., Brixlegg; Kupferbergbau Mitterberg, Münlbach am Hochkönig; Aluminiumwerk Mattighofen-Ranshofen);

[505] 7.) The Erste Donau Dampfschiffahrtsgesellschaft, Vienna;

● [377] 8.) The large enterprises producing electric power; and, finally,

[315] 9.) The enterprises for the exploitation of crude oil.

With the enacted legislation the ownership-rights (re: corporations) or the assets and liabilities of certain enterprises (limited companies, etc.) or plants (branch establishments of enterprises located abroad) became the property of the Republic of Austria. This in turn implied also the transfer of the administration of the nationalized enterprises to the Austrian government, provided that such enterprises were not located within the Russian zone (USIA establishments) and therefore beyond Austrian control. The enforcement of the nationalization, however, is not completed because:

328
316 It is thought that in the light-metals sector (production of aluminum) the bauxite mines at Unterlaussa (on the frontier between Styria and Lower Austria) will be extended to obtain at least the necessary raw materials for production. In accordance with the increase in the total European aluminum production required by the OEEC, Paris, Austria will endeavor to increase aluminum production in the smelting plants of the Vereinigte Aluminum Werke Ranshofen and in the plants at Lend of the Salzburger Aluminium Gesellschaft m.b.H. (up to 30 and 10,000 tons a year, respectively).

The production of non-finished metal products shall be extended by the completion of a light-metals plant of the Österreichische Metallwerke A.G., the construction of which is already far advanced and by the project of a heavy-metal plant of the same firm. These plants are designed to overcome the bottle-neck created by the loss of the plants for non-finished metal products (Krupp in Berndorf and the Enzesfelder Metallwerke). For the Metallwerke Plansee Gesellschaft m.b.H., Reutte (Tyrol), the erection of a plant for the production of molten molybdemum has been planned; in addition, the erection of heavy presses, granulating and sharpening machines for the production of heavy metals as well as of special electrolytical methods for the production of hard metal alloys (Diamantmetall-legierungen) is proposed.

[652] In the scope of the investment program 1950-52 investments, 131.3 million schillings have been mobilized from counterpart funds for these industries. Of this amount approximately 40 million schillings (30.5 per cent) already has been allotted.

c) Investments in the electric industry.

377
[127] A large number of machinery units and steam-power plants were destroyed or lost by the war. The Austrian economy, therefore, could recover only very slowly in the years 1945, 1946 and 1947, particularly because the supply of energy was definitely insufficient in the months of water shortage. Since 1948, supported by the Marshall Plan, remarkable progress has been made in supplying energy within the economic planning for electricity. Austria tries to overcome the existing difficulties, which arise out of the rapidly changing demand for current on the part of industry, in two ways: (1) by the extension of storage facilities and of caloric

installations insofar as there are secure and sufficient supplies of coal (or insofar as new supplies can be exploited, such as those at St. Stefan im Lavanttal/Carinthia); and (2) by the extension of running water plants, or by stream diversion for the better utilization of existing storage facilities as well as by the reconstruction of war-damaged steam power plants (such as at the Vereinigte österreichische Eisen- und Stahlwerke A.G., Linz). The water power facilities, which are capable of extension, are estimated at 25 to 30 billion kwh (or even more). 377

In the course of carrying forward the development of water-power plants and of caloric-power plants since 1937, their capacity has increased by more than seventy per cent. The annual production amounted to 1,962 million kwh in 1946, 3,310 million kwh in 1949, and 3,717 million kwh in 1950.

Of the 1,410 million schillings provided in the investment program for 1950-52, 571.5 million schillings (40.5 per cent) was allotted to the development of energy in 1950. [652]

Important huge projects in the hydro-electric field which are now under construction and already far advanced are: the Ennskraftwerke, the Draukraftwerke, and, most important, the Tauernkraftwerke where progress on the Limberg-Sperre proposed for 1949-50 exceeded plans. The latter is one of the largest dams in Europe to cost approximately 250 million schillings. It is to be finished in 1952 and will be the main dam of the Kaprun-Tauern system. Part of the storage dam was made ready as early as 1949 and, with the installation of the second set of machinery in the power plant of the main dam, brings about an essential means for overcoming the exceedingly high winter demands for electricity. In 1950 alone 180,000 cubic meters of cement were poured into the construction of the Limberg-Sperre, thus making it possible to store approximately 61 GwH in the winter of 1951-52. The stages contemplated up to 1952-53 foresee in hydraulic water power an additional capacity of 346.5 megawatt as compared to a capacity (in million kwh) of 612.6 in winter and 1,071.4 in summer--a total of 1,684.0 for the whole year. The caloric power plants under construction are expected to bring an increase in capacity of 156.2 megawatt in the same period. The single projects are distributed over the whole federal territory with the bulwark located in the western federal countries. In addition, there is an extension of overland lines and high tension installations and other energy facilities.

Up to the end of 1949 approximately 9,000 agricultural machines, with a total value of 31.5 million schillings, could be bought out of counterpart funds. Through the formation of agricultural machine cooperatives (about 33) even medium and small-sized farms were able to share in the advantages of technical modernization. The progress of electrification in rural areas supplied light and current to 4,800 farms. Storehouses and freezer lockers have been built in fruit producing areas. In addition, dairies and cheese making plants have been erected from ERP funds.

Further investments in the agricultural sphere are being carried out in accord with the investment program of 1950-52. For these purposes 270 million schillings were released from counterpart funds in 1950 (i.e., 43.6 per cent of the 620 million schillings provided in the agricultural priority program, or 34.6 per cent of the total of 780 million schillings provided in the whole program).

In forestry (exports), which is of paramount importance to Austria, the approximate prewar level of wood and timber output and supply has been achieved through various rationalizations and especially better means of transport and better roads. In 1948 the timber output was 8.24 million cubic meters (Festmeter); in 1949 already it was 9.24 million cubic meters; in 1950 the output could be increased to slightly over 10 million cubic meters.

The increasing production of timber and the stoppage of exports of undressed timber made it possible to supply sawmills and timber finishing plants with bigger quantities of wood in 1949 and 1950 than prior to the war. In 1949, 2.50 million cubic meters of whole timber were planed. In 1950 the amount was 4.41 million cubic meters as compared to 3.14 million cubic meters in 1937. The paper, cellulose, wood fiber and pulp industries could be provided to an increasing extent with all necessary raw materials (especially wood pulp); thus, covering not only the domestic needs but also enabling Austria to gain a foothold in former export markets.

The forestry and sawmill industry received 90 million schillings in 1950 out of counterpart funds and, in addition, 22.5 million schillings in December 1950 to be carried forward for use in 1951.

433 raw iron was increased to about 1.04 million tons (as
[397] compared to 883,000 tons in the preceding year) and the raw steel production to about 1.03 million tons (as compared to 943,350 tons in the preceding year). This increase in production was possible through an increase in mining output, which amounted to approximately 2.37 million tons in 1951, as compared to 1.86 million tons
[398] in 1950. In the car industry, emphasis lay on the pro-
[392] duction of tractors, heavy trucks, busses and motorcycles. Agricultural machinery production was 119 per cent higher in 1950, lathes 110 per cent higher, ball-bearings 327 per cent, nails and screws 56 per cent more than in 1937. Although the electrical industry
[393] had suffered most seriously from war damages and dismantling, and although various raw materials, mostly of foreign origin (such as electric thin-gauge plate, copper, lead and various special products), could be obtained only with difficulty, the total production in 1950 was double that of 1937. This favorable development has continued in 1951 despite the shortage in raw
[391] materials. The chemical industry reached a capacity far higher than before the war in spite of extensive war damages. The Linz Stickstoffwerke, for example, not only cover the domestic demand for nitrogen but export considerable quantities of nitrate of lime and phosphate. Production of the latter amounted to 525 tons per month in 1938, during the first six months of 1951 it reached an average of 35,000 tons per month. The results in some finishing and consumer goods industries lagged behind, but even so substantial increases could be reached, especially in enterprises which are important
[289] for export (for example, the paper industry). By 1950 three per cent more paper was produced than in 1937.

[316] A remarkable increase was made in domestic
[377] soft coal mining. The production of electric current rose from 3,050 million kwh, 1946, to 4,911 million kwh, 1950, an increase of 61 per cent. This remarkable increase of capacity in 1950 is almost exclusively due to water power, the production of which increased to 690 million kwh. In extending and financing electric power projects differentiation must be made between finishing started projects (water-power plants, steam plants, transmission lines and transformers), new construction, international projects, export, and projects of local importance (see Wirtschaftsberichte No. 12, October 1951: "Oesterreichische Wasserkräfte als Beitrag zur Energieversorgung Westeuropas," by Erich Heller and Oscar Vas).

361 considered, the most attractive place in the entire Province. What makes of it a
529 health-resort is the fact that of all places in the Province, it has the record
133 for sunshine, and that it has the same wonderful climate as the Swiss health-resort of Davos, only 18 kilometres distant as the crow flies.

361 That the Montafon, particularly the Inner Fratte, has lost its original character
133 of a mountain farming area is immediately evident when one comes to Parthenen,
377 last of the valley settlements. At first glance it is recognised as an industrial township. Montafon's name of the "Valley of White Coal" is here justified, for the district in which Parthenen is situated is devoted to the production of electrical power. Cable-railways, elevators, narrow-gauge railways running at a height of over 5,000 and 6,000 feet, extensive plants and tunnels several kilometres in length show at first glance with what energy technical knowledge is striving to render the forces of nature of service to man. The source of these forces is the glaciers of the main range, the "Blue Silvretta", famous as a ski-resort in spring. It is easy to repeat without giving the matter further thought that the beauty and natural charm of the mountains are destroyed when their useful potentialities are exploited by mechanical means. It is far wiser and more just to go oneself (and how much simpler the many inventions of the much abused mechanical developments have made such a trip), to ascertain with one's own eyes that the two enormous artificial lakes at Vermunt and Obervermunt have lent a touch of beauty to the picture which was lacking in the monotonous valley which they have superseded. For the mountain lover there still remain the combs and peaks of the monarch of the Vorarlberg Alps, the 9892 foot high Piz Buin, which he can approach with untroubled heart and a determination to dare its perils, without any risk that his ideal picture will be found marred by the spirit of a profit-seeking age.

529 THE LOFTY CASTLE OF THE WHITE ART. It is not so very many years
526 ago that winter was regarded as a visitation of God. More especially was this the attitude of the mountain folk whose means of livelihood were drastically curtailed during the cold months by the many feet of snow. This attitude only underwent a change when human ingenuity succeeded in making use of two strips of wood bound to the feet with one end bent upwards, which brought with them greater freedom of movement even over deep snow. This happened in Austria towards the end of the last century. One of the areas in which this now widespread

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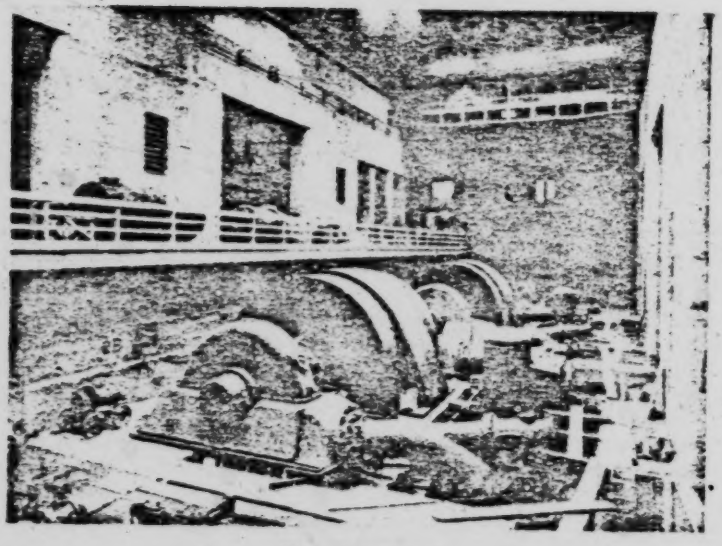


Kaprun Power House.

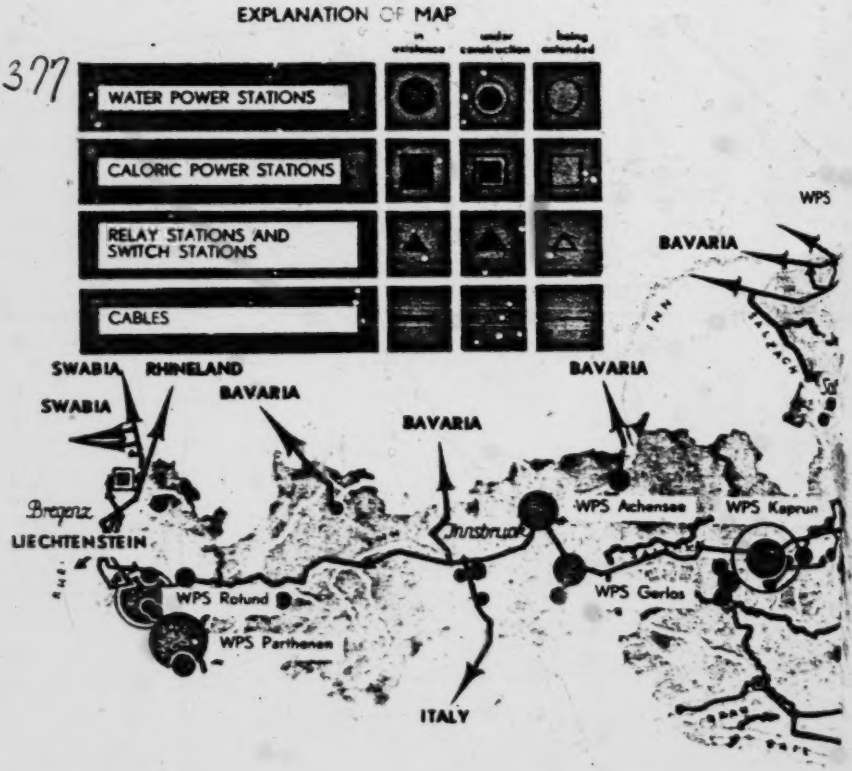
AUSTRIA'S RICHES—THE "WHITE COAL"

[135]

The power system of the Austro-Hungarian Monarchy was based entirely on rich coal deposits mostly located in Upper Silesia, and later re-inforced by the discovery of great oilfields in Galicia. At the end of the war in 1918, the young Republic saw itself faced with the task of replacing as far as possible the loss of almost all its coal by the available water power. The exploitation of native water power, however, was badly neglected during the First Republic because of shortage of capital; for this neglect a heavy price was to be paid after 1945.

In Western Austria, an important power producing plant—the "Ill Works" in Vorarlberg—was set up, the midway stage being reached between 1925 and 1935. It was used, however, solely to export current to Germany, and the electrification of the Austrian railways which had been begun long before was stopped half-way.

Between 1938 and 1944, the extension of the Austrian water power system was not carried out in the interests of home industry. The works built during this period were designed to supply current from the highest Austrian Alpine regions to Germany, while our own country was supposed to be supplied in winter



Power Stations and

with calorific current from the brown-coal districts of Middle- and Western Germany.

Austria was to be torn in half in an industrial sense and re-formed according to the ideas of Greater Germany. Thus Vorarlberg was given electric cable connect-

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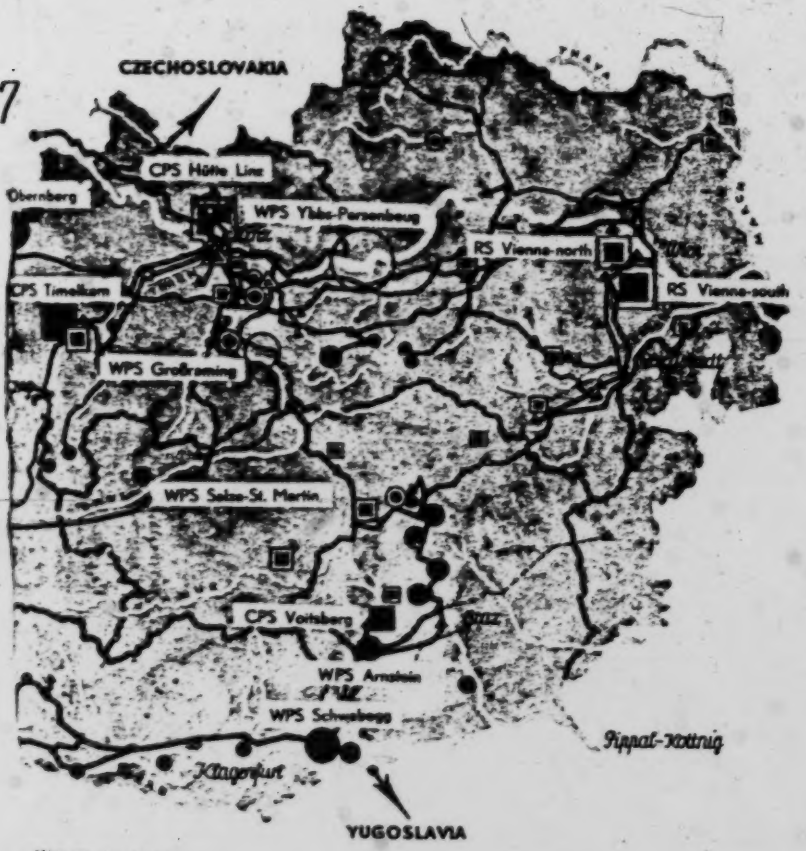
CZECHOSLOVAKIA
CPS Hütte Linz
Obernberg
WPS Ybbs-Persenbeug
RS Vienna-north
RS Vienna-south
CPS Timelkam
WPS Großraming
WPS Salza-St. Martin
CPS Voitsberg
WPS Arnstein
WPS Schwabegg
Klagenfurt
YUGOSLAVIA
Judenburg
Leoben
Graz
Villach
Spittal
Hochtauern
Tauern
Radstadt
Pongau
Pinzgau
Zell am See
Kitzbühel
Innsbruck
Arlberg
Bregenz
Feldkirch
Landeck
Reutte
Imst
Lienz
Tirol
Salzburg
Linz
Steyr
Wels
Amstetten
Krems
Wien
Eisenstadt
Neusiedler See
Burgenland
Semmering
Mürzzuschlag
Bruck
Leoben
Knittelfeld
Liezen
Ennstal
Steiermark
Kärnten
Villach
Klagenfurt
Völkermarkt
Wolfsberg
Lavanttal
Deutschlandsberg
Radkersburg
Fürstenfeld
Hartberg
Oberwart
Güssing
Neusiedler See
Eisenstadt
Mattersburg
Wiener Neustadt
Baden
Mödling
Wien
Floridsdorf
Donaustadt
Donau
Tulln
Krems
Melk
Amstetten
Waidhofen
Scheibbs
Lilienfeld
St. Pölten
Mistelbach
Gänserndorf
Hollabrunn
Korneuburg
Tulln
Zwettl
Gmünd
Waidhofen
Horn
Krems
Melk
Amstetten
Linz
Steyr
Wels
Gmunden
Vöcklabruck
Braunau
Ried
Schärding
Grieskirchen
Eferding
Urfahr-Umgebung
Freistadt
Rohrbach
Perg
Mauthausen
Enns
Steyr-Land
Kirchdorf
Salzburg
Hallein
Tamsweg
Zell am See
Saalfelden
Kitzbühel
Innsbruck
Schwaz
Kufstein
Reutte
Imst
Landeck
Lienz
Tirol
Vorarlberg
Bregenz
Feldkirch
Arlberg
Pongau
Pinzgau
Tauern
Hochtauern
Radstadt
Spittal
Villach
Klagenfurt
Völkermarkt
Wolfsberg
Lavanttal
Judenburg
Leoben
Graz
Knittelfeld
Liezen
Ennstal
Steiermark
Kärnten
Deutschlandsberg
Radkersburg
Fürstenfeld
Hartberg
Oberwart
Güssing
Neusiedler See
Eisenstadt
Mattersburg
Wiener Neustadt
Baden
Mödling
Wien
Floridsdorf
Donaustadt
Donau
Tulln
Krems
Melk
Amstetten
Waidhofen
Scheibbs
Lilienfeld
St. Pölten
Mistelbach
Gänserndorf
Hollabrunn
Korneuburg
Zwettl
Gmünd
Horn
Semmering
Mürzzuschlag
Bruck
Leoben
Knittelfeld
Liezen
Ennstal
Steiermark
Kärnten

377 Occupation, construction in these years was of a thoroughly "wartime" standard. A characteristic example was furnished by the Gerlos Power Station.

In 1945 a resurrected Austria found a thoroughly disorganised power system with no system of compensating the difference between winter and summer power supplies or between river and mountain stations. There were only the beginnings of a purely Austrian cable system, for in the years 1938—1944, the existing 110,000 volt system was connected up to the power system of the German Reich. Development of the Austrian system now had to be directed to laying a main power conduit in a west-easterly direction which would run the entire length of the land. In the few years since the end of the war there has already been considerable progress in this direction. For the first time since the erection of the 110,000 volt cable over the Arlberg in 1947, the great Vorarlberg power stations are linked with the inner Austrian network. First the power stations of Tyrol were provisionally connected with the eastern provinces by a 110,000 volt line carried by wooden pylons over the Gerlos Pass. In April 1948, the first part of the future 220,000 volt main cable was put into use from the relay station of Ernsthofen to Pottenbrunn. The prolongation of the main cable to Kaprun and beyond is planned to take place at the same time as the extension of the Tauern Power Station, work having been started in the autumn of 1948. The future Austrian high tension network will not only provide a uniform and smoothly running system at home, but will also make possible a generous exchange of current with all neighbouring states.

Although man power was crippled at the end of the war and is still not properly organised, it was possible by 1948 to start construction in 60 different places. Austria, the richest land for water power in Central Europe, has so far only utilised one sixth of this treasure-store of nature.

[641] Through the efforts of the United Nations Power Committee there is already close cooperation among the countries of Europe with a view to creating a pan-European power service. Owing to her enormous resources in water-power, Austria will be in a position to supply all the electric current still lacking in Europe, after the extensions of the present power stations have been completed and new stations constructed. Plans for exchange of current from Upper Italy to the Lower Rhine have been under consideration for years.

The Tyrolese and Vorarlberg sources of water power which have been developed or are worth developing, estimated together at about 11 milliard kilowatt hours yearly, are designed mainly for export. Water power east of the Gerlosplatte, on the other hand, will have to be used to cover inland demands. Austria most needs power in the eastern provinces, since her industries are mainly located in the Vienna and Linz districts. The principal power stations which have been designed for the supply of inland current are the Tauern Power Station of Kaprun, the Enns Power Work and the Danube Power Works of Ybbs-Persenbeug. After completion

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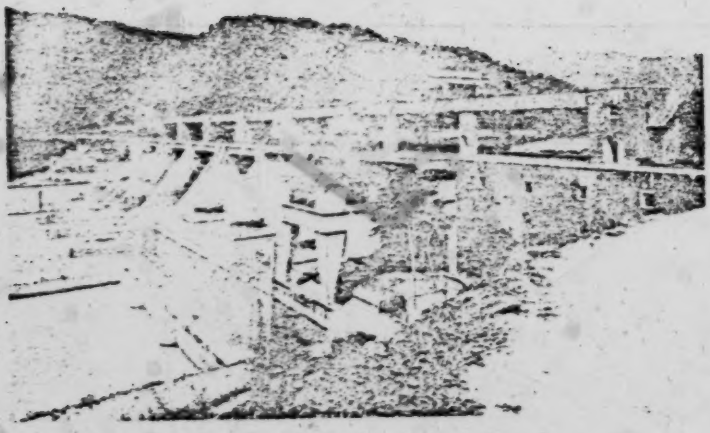


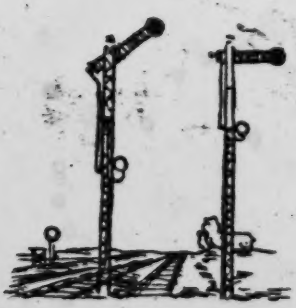
River Power Station, Schwabegg-on-the-Drau.

of the 370 foot high Limberg dam, the building of which was begun in 1948, Kaprun will produce 180 million kilowatt hours of valuable winter peak current. A chain of river power stations is under construction on the Enns which will thoroughly exploit the falls of the river. After its completion the Danube power unit Ybbs-Persenbeug will produce a milliard kilowatt hours per year, thus becoming the biggest river power station of Central Europe.

The water power which is awaiting development in Tyrol and Vorarlberg will yield when completed about 9 milliard kilowatt hours of current yearly. In the area of the Bregenzer Ache there are several weirs which can be harnessed for power, six power stations meaning a yield of 1 milliard kilowatt hours yearly. On the Ill there are three power stations working and a fourth is nearing completion. The extension of the Ill Works for which additional accumulators and power stations are planned will make available almost 2 milliard kilowatt hours of current yearly. The exploitation of the Inn River and the water power of the Ötz District will bring in 4·4 milliard kilowatt hours a year. Apart from this there are important power projects for the Isel District of East Tyrol and in the Reisseck-Kreuzeck group on either side of the Möll Valley.

377 Despite her lack of coal, Austria is in the enviable position of being able to carry out her plans for producing electric power on a generous scale, thanks to her "white coal". The water-power of Austria is to a great extent capable of being dammed and allows of favourable regulation according to changing pressure. Its development has a dual aim. On the one hand it is planned to meet the increasing demand for electricity from home sources and to make the country independent of imported current, previous caloric supplies being replaced by water power as far as possible, thus reducing coal consumption to the lowest possible figure. On the other hand Austria will have at her disposal a considerable exportable surplus of electric energy after full exploitation of her water power, thus permitting this country to play a central and equalising role in the electricity production of Europe.

Austria approaches this task with the knowledge that the linking up of the various economic interests of individual states in a planned continental economy is the best guarantee for a long period of peace and for general well-being.



INTRODUCTION

per cent of the world's output of magnesite and thus took second place after the Soviet Union. In producing 9 per cent of the world's graphite output, Austria followed close on the Soviet Union, Korea, and Germany.[4] The output of other minerals was less impressive and there were no great export surpluses.

About fifteen years ago, oil was discovered near the little village of Zistersdorf, near Vienna. Production was started in 1932 at the very low level of 100 tons, but it increased quickly until it reached 33,000 tons in 1937, the last year of Austria's independence. Since then the Germans, in their urgent need for oil, greatly increased the output in this district and annual production reached a level of one to two million tons. This quantity greatly exceeds Austria's peace-time requirements of oil.

As against her lack of coal, Austria is in the fortunate position of having a practically unlimited supply of water power. Although this had by no means been fully harnessed, the 1936 production of 2,680 million kW.h.[5] of electricity sufficed to cover more than half the country's energy requirements. A small proportion of this electricity (340 million kW.h.) was exported.

Stretching the meaning of "natural resources" somewhat beyond its usual limits, two further assets, of great importance to Austria's economy, may be mentioned at this juncture. These are the geographic position of Austria in the heart of Europe, and the beauty of the Austrian towns and countryside. With regard to the first, Austria and particularly Vienna have, ever since the days of the Roman traders, been important junctions of the main European traffic routes. The Danube Valley, opening a gap between the Alps and the Carpathians, provide an east-west route, linking the Balkans with central and western Europe. At the same time the Brenner

[CP. p. 12, CAT. 116 -- ANALYST]

9: Rothschild E-4, 5 (no date) 1947 EK1 Austria EK1

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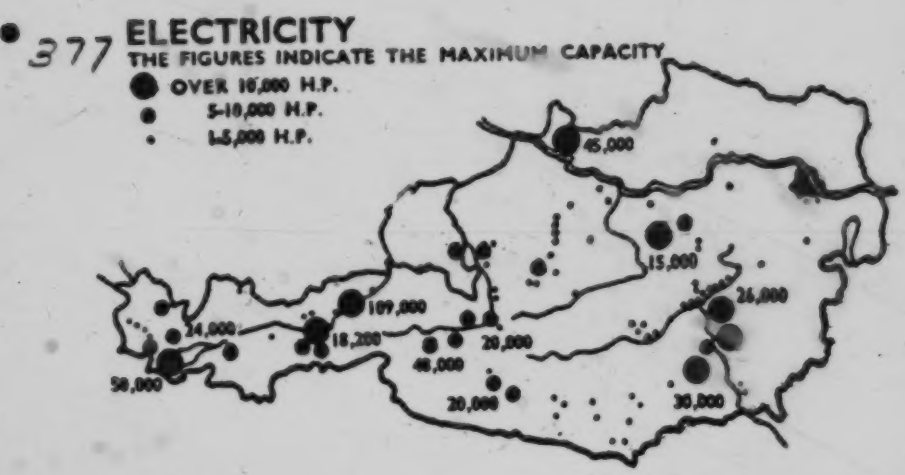

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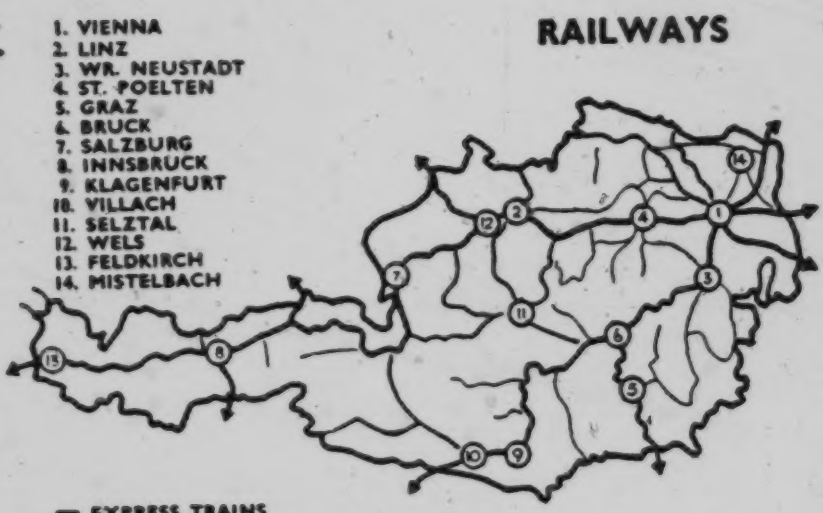
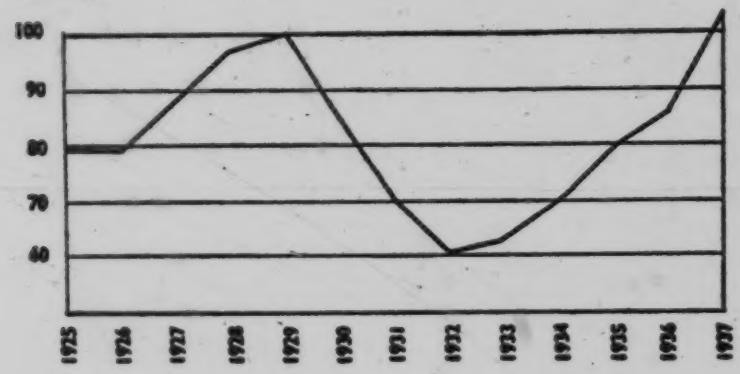


[p. 112]

INDEX OF INDUSTRIAL PRODUCTION

1929=100

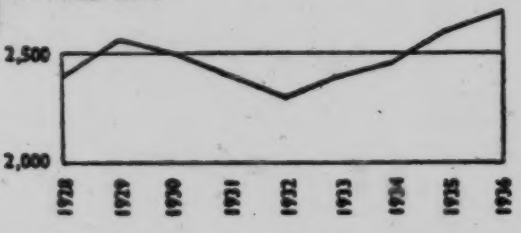
433



ELECTRICAL ENERGY

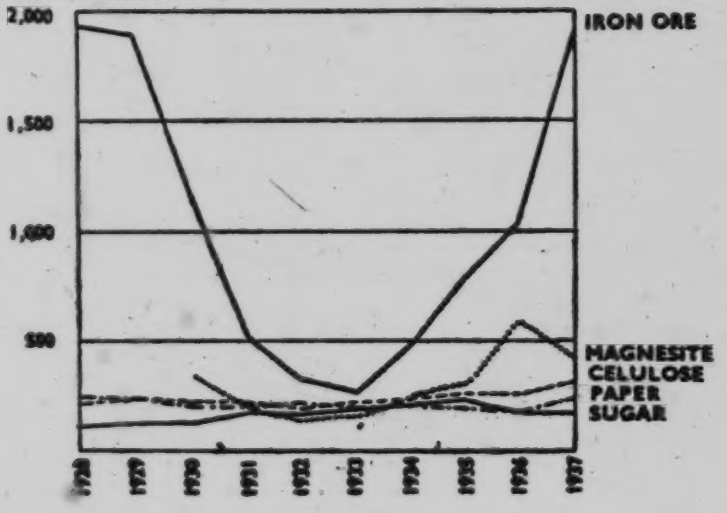
IN MILL. KW.

• [377]



OUTPUT OF CERTAIN COMMODITIES

IN 1,000 TONS



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